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Group Art Unit: 3644

REMARKS

By the present amendment, new claims 16-19 have been added to give Applicant more complete protection for his invention. The new claims are fully supported in the application as filed. See, for example, paragraph 7 of the application as well as FIGS. 1-5.

Drawings

The drawings have been objected to under 37 C.F.R. § 1.83(a) for not showing at least one laterally extending flange that seats radially behind the shell retaining flange of claim 2. This objection is respectfully traversed.

Claim 2 refers to the external ribs of the inflation and calls for a laterally extending flange that seats radially behind a shell retaining flange. The inflation laterally extending flange of claim 2 is the flange 68 on each of the T-shaped ribs. Note that the inflation ribs can also be L-shaped. It fits behind the inwardly directing flanges on the shell 42 that form the generally T-shaped channels 48. See FIGS. 2-4. As illustrated in FIG. 2, the flange 68 seats radially behind the flange that forms the T-shaped channels 48. In other words, the flange 68 is positioned within the chamber 52 and behind the flange that forms the slot from the perspective of the interior of the shell 42. It is therefore submitted that no amendments to the drawings need to be made.

Claim Rejections – 35 U.S.C. § 102

Claims 1-4 and 9 have been rejected under 35 U.S.C. § 102(e) as being met by the Milbrath et al. U.S. Patent No. 6,435,132. This rejection is respectfully traversed.

Contrary to the Examiner's representation, Milbrath et al. '132 does not disclose each and every limitation of claims 1-4 and 9 and thus cannot anticipate these claims. In particular, with respect to claim 1, Milbrath et al. '132, does not disclose at least one retaining flange that defines an edge of a slot 50 in a channel that faces the interior of the shell. These slots are illustrated in FIGS. 2-4 as slots 50 in Applicant's drawings. Whereas the Milbrath et al. '132 discloses a

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plurality of grooves formed in the inner surface of the shell, none of the grooves form a retaining flange that defines and edge of a slot in the channel that faces the interior of the shell.

Further, the Milbrath et al. '132 patent does not disclose an inflation with an external rib in each of the channels that is retained for *radial articulation* within the channels during inflation and deflation. It is quite clear from Milbrath et al. '132 that the ribs 26 do not articulate within the channels 27. See FIGS. 4(a) and 4(b) of Milbrath et al. '132. The ribs 26 remain fixed within the grooves during inflation and deflation. See also, for example, column 5, lines 4-8:

As shown best in FIG. 4, ribs 26 have a circular cross-section and rib-receiving grooves 27 having corresponding circular cross-section *dimensioned to be substantially the same as ribs 26. (Emphasis added)*

The ribs in the Milbrath et al. '132 patent are meant to be reinforcing so as to maintain the relative position of the ribs within the shell of the inflation during inflation and deflation of the flexible inflation or liner.

Claims 2-4 and 9 depend from claim 1 and define over Milbrath et al. '132 in the same fashion as claim 1. It is therefore submitted that claims 1-4 and 9 are not anticipated under 35 U.S.C. § 102(e) by Milbrath et al. '132.

Claim Rejections – 35 U.S.C. § 103

Claims 5, 6, 10, 11, 14, and 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Milbrath et al. '132 patent. This rejection is respectfully traversed.

Each of these claims depends from claim 1 and define over the Milbrath et al. '132 patent in the same fashion as claim 1. There is no teaching or suggestion in Milbrath et al. '132 of radial articulation between the ribs and the groove in Milbrath. Thus, claim 1, and all of the claims dependent from claim 1, define over Milbrath et al. '132 at least in that the external ribs in each of the channels are retained for radial articulation within the channels during inflation and deflation of the inflation. No such construction is suggested in the Milbrath et al. '132 reference.

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Further, with respect to claims 5, 6, 10, 11, 14 and 15, which call for T-shaped transverse cross sections of the channels and/or the longitudinal ribs. No such structure is suggested by Milbrath. Milbrath does not disclose any alternative structure to the grooves. Thus, claims 5, 6, 10, 11, 14, and 15 patentably distinguish over Milbrath et al. '132 in calling for at least one of the longitudinal ribs and longitudinal channels being T-shaped in cross section.

Allowable subject matter

The allowance of claims 7, 8, 12, and 13 is acknowledged with appreciation. These claims have not been rewritten in independent form in view of Applicant's position with respect to patentability of claim 1. The Examiner has recognized the patentability in the loose fitting T-shaped ribs in the T-shaped channels. However, nowhere in the application is there a disclosure that the subject matter of claim 7 is critical in the desired inflation process of Applicant. The Examiner is requested to point out where in the application there is a disclosure of the criticality of the subject matter of claims 7, 8, 12, and 13 for the invention. In this respect, the Examiner's attention is directed to paragraph 7 of the application which reads in relevant part as follows:

The invention also contemplates that the interior longitudinal channels and the ribs can take various forms so long as the ribs are retained within the channels during inflation and deflation of the inflation and so long as the ribs can articulate within the interior longitudinal channels during the inflation and deflation cycle.

New claims 16-19 have been added and are believed to patentably define over the Milbrath et al. '132 patent and all other references known to Applicant. In particular, claim 16 calls for an inflation which has an external rib that is loosely retained within the interior longitudinal channels in a shell for radial articulation of the ribs with respect to the channels during inflation and deflation of the inflation. This concept is not disclosed in any of the references.

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In view of the foregoing remarks and amendments, it is submitted that the claims are in condition for allowance. Early notification of allowability of the claims is respectfully requested.

Respectfully submitted,

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